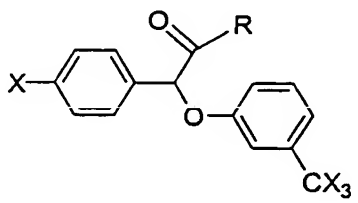
WHAT IS CLAIMED IS:

1. A method of modulating Type 2 diabetes in a mammal, comprising: administering to said mammal a therapeutically effective amount of the (–) stereoisomer of a compound of Formula I,



(I)

wherein:

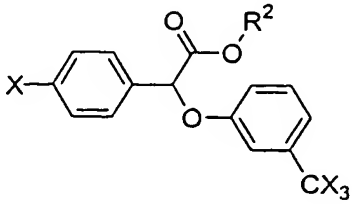
R is a member selected from the group consisting of a hydroxy, lower aralkoxy, di-lower alkylamino-lower alkoxy, lower alkanamido lower alkoxy, benzamido-lower alkoxy, ureido-lower alkoxy, N'-lower alkyl-ureido-lower alkoxy, carbamoyl-lower alkoxy, halophenoxy substituted lower alkoxy, carbamoyl substituted phenoxy, carbonyl-lower alkylamino, N,N-di-lower alkylamino-lower alkylamino, halo substituted lower alkylamino, hydroxy substituted lower alkylamino, lower alkanolyloxy substituted lower alkylamino, ureido, and lower alkoxycarbonylamino; and

X is a halogen; or

a pharmaceutically acceptable salt thereof,

wherein the compound is substantially free of its (+) stereoisomer.

2. The method of claim 1, wherein the compound is a compound of Formula II,



(II)

wherein:

R^2 is a member selected from the group consisting of a phenyl-lower alkyl, lower alkanamido-lower alkyl, and benzamido-lower alkyl.

3. The method of claim 1, wherein the compound is (–) 2-acetamidoethyl 4-chlorophenyl-(3-trifluoromethylphenoxy) acetate.

4. The method of claim 1, wherein the compound is administered by intravenous infusion, transdermal delivery, or oral delivery.

5. The method of claim 1, wherein the amount administered is about 100 mg to about 3000 mg per day.

6. The method of claim 1, wherein the amount administered is about 500 mg to about 1500 mg per day.

7. The method of claim 1, wherein the amount administered is about 5 to about 250 mg per kg per day.

8. The method of claim 1, wherein the compound is administered together with a pharmaceutically acceptable carrier.

9. The method of claim 1, wherein the compound modulates hyperglycemia by reducing blood glucose levels in the mammal.

10. The method of claim 1, wherein the compound modulates hemoglobin A_{1c} in the mammal.

11. The method of claim 1, wherein the compound modulates a microvascular and macrovascular complication associated with diabetes.

12. The method of claim 11, wherein the microvascular complication is retinopathy, neuropathy or nephropathy.

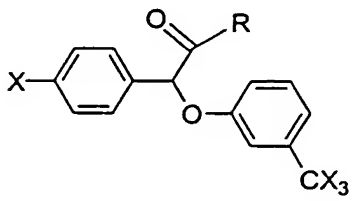
13. The method of claim 11, wherein the macrovascular complication is cardiovascular disease or peripheral vascular disease.

14. The method of claim 1, wherein the compound modulates atherosclerosis.

15. The method of claim 1, wherein the compound prevents the development of diabetes in a mammal.

16. The method of claim 1, wherein the compound is administered in combination with a compound selected from the group consisting of: a sulfonylurea or other insulin secretogogue, a thiazolidinedione, a fibrate, a HMG-CoA reductase inhibitor, a biguanide, a bile acid binding resin, nicotinic acid, a α-glucosidase inhibitor, and insulin.

17. A method for modulating insulin resistance in a mammal, comprising: administering to said mammal a therapeutically effective amount of the (–) stereoisomer of a compound of Formula I,



(I)

wherein:

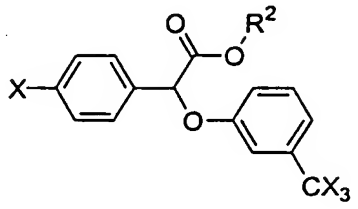
R is a member selected from the group consisting of a hydroxy, lower aralkoxy, di-lower alkylamino-lower alkoxy, lower alkanamido lower alkoxy, benzamido-lower alkoxy, ureido-lower alkoxy, N'-lower alkyl-ureido-lower alkoxy, carbamoyl-lower alkoxy, halophenoxy substituted lower alkoxy, carbamoyl substituted phenoxy, carbonyl-lower alkylamino, N,N-di-lower alkylamino-lower alkylamino, halo substituted lower alkylamino, hydroxy substituted lower alkylamino, lower alkanolyloxy substituted lower alkylamino, ureido, and lower alkoxycarbonylamino; and

X is a halogen; or

a pharmaceutically acceptable salt thereof,

wherein the compound is substantially free of its (+) stereoisomer.

18. The method of claim 17, wherein the compound is a compound of Formula II,



(II)

wherein:

R^2 is a member selected from the group consisting of a phenyl-lower alkyl, lower alkanamido-lower alkyl, and benzamido-lower alkyl.

19. The method of claim 17, wherein the compound is (–) 2-acetamidoethyl 4-chlorophenyl-(3-trifluoromethylphenoxy) acetate.

20. The method of claim 17, wherein the compound is administered by intravenous infusion, transdermal delivery, or oral delivery.

21. The method of claim 17, wherein the amount administered is about 100 mg to about 3000 mg per day.

22. The method of claim 17, wherein the amount administered is about 500 mg to about 1500 mg per day.

23. The method of claim 17, wherein the amount administered is about 5 to about 250 mg per kg per day.

24. The method of claim 17, wherein the compound is administered together with a pharmaceutically acceptable carrier.

25. The method of claim 17, wherein the compound prevents the development of insulin resistance in a mammal.

26. The method of claim 17, wherein the compound modulates polycystic ovarian syndrome.

27. The method of claim 17, wherein the compound modulates Impaired Glucose Tolerance.

28. The method of claim 17, wherein the compound modulates obesity.

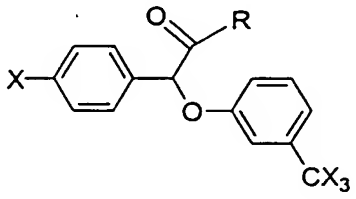
29. The method of claim 17, wherein the compound modulates gestational diabetes.

30. The method of claim 17, wherein the compound modulates Syndrome X.

31. The method of claim 17, wherein the compound modulates atherosclerosis.

32. The method of claim 17, wherein the compound is administered in combination with a compound selected from the group consisting of: a sulfonylurea or other insulin secretogogue, a thiazolidinedione, a fibrate, a HMG-CoA reductase inhibitor, a biguanide, a bile acid binding resin, nicotinic acid, a α-glucosidase inhibitor, and insulin.

33. A method of alleviating hyperlipidemia in a mammal, comprising administering to said mammal a therapeutically effective amount of the (–) stereoisomer of a compound of Formula I,



(I)

wherein:

R is a member selected from the group consisting of a hydroxy, lower aralkoxy, di-lower alkylamino-lower alkoxy, lower alkanamido lower alkoxy, benzamido-lower alkoxy, ureido-lower alkoxy, N'-lower alkyl-ureido-lower alkoxy, carbamoyl-lower alkoxy, halophenoxy substituted lower alkoxy, carbamoyl substituted phenoxy, carbonyl-lower alkylamino, N,N-di-lower alkylamino-lower alkylamino, halo

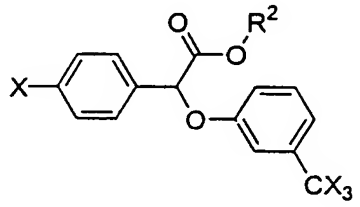
substituted lower alkylamino, hydroxy substituted lower alkylamino, lower alkanolyloxy substituted lower alkylamino, ureido, and lower alkoxycarbonylamino; and

X is a halogen; or

a pharmaceutically acceptable salt thereof,

wherein the compound is substantially free of its (+) stereoisomer.

34. The method of claim 33, wherein the compound is a compound of Formula II,



(II)

wherein:

R^2 is a member selected from the group consisting of a phenyl-lower alkyl, lower alkanamido-lower alkyl, and benzamido-lower alky.

35. The method of claim 33, wherein the compound is (–) 2-acetamidoethyl 4-chlorophenyl-(3-trifluoromethylphenoxy) acetate.

36. The method of claim 33, wherein the compound is administered by intravenous infusion, transdermal delivery, or oral delivery.

37. The method of claim 33, wherein the compound lowers cholesterol levels, triglyceride levels, or both.

38. The method of claim 33, wherein the amount administered is about 100 mg to about 3000 mg per day.

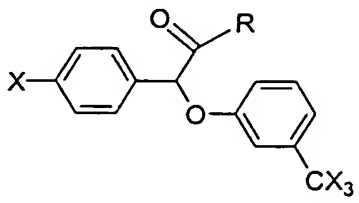
39. The method of claim 33, wherein the amount administered is about 500 mg to about 1500 mg per day.

40. The method of claim 33, wherein the amount administered is about 5 to about 250 mg per kg per day.

41. The method of claim 33, wherein the compound is administered together with a pharmaceutically acceptable carrier.

42. The method of claim 33, wherein the compound is administered in combination with a compound selected from the group consisting of: a sulfonylurea or other insulin secretogogue, a thiazolidinedione, a fibrate, a HMG-CoA reductase inhibitor, a biguanide, a bile acid binding resin, nicotinic acid, a α-glucosidase inhibitor, and insulin.

43. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a therapeutically effective amount of the (–) stereoisomer of a compound of Formula I,



(I)

wherein:

R is a member selected from the group consisting of a hydroxy, lower aralkoxy, di-lower alkylamino-lower alkoxy, lower alkanamido lower alkoxy, benzamido-lower alkoxy, ureido-lower alkoxy, N'-lower alkyl-ureido-lower alkoxy, carbamoyl-lower alkoxy, halophenoxy substituted lower alkoxy, carbamoyl substituted phenoxy, carbonyl-lower alkylamino, N,N-di-lower alkylamino-lower alkylamino, halo substituted lower alkylamino, hydroxy substituted lower alkylamino, lower alkanolyloxy substituted lower alkylamino, ureido, and lower alkoxycarbonylamino; and

X is a halogen; or

a pharmaceutically acceptable salt thereof,

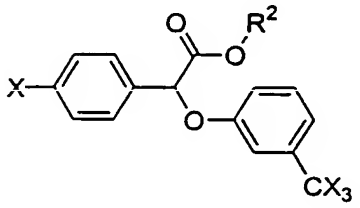
wherein the compound is substantially free of its (+) stereoisomer.

44. The pharmaceutical composition of claim 43, wherein the pharmaceutical composition modulates Type 2 diabetes.

45. The pharmaceutical composition of claim 43, wherein the pharmaceutical composition modulates insulin resistance.

46. The pharmaceutical composition of claim 43, wherein the pharmaceutical composition modulates hyperlipidemia.

47. The pharmaceutical composition of claim 43, comprising a therapeutically effective amount of the (–) stereoisomer of a compound of Formula II,



(II)

wherein:

R^2 is a member selected from the group consisting of a phenyl-lower alkyl, lower alkanamido-lower alkyl, and benzamido-lower alkyl.

48. The pharmaceutical composition of claim 43, wherein the compound is (–) 2-acetamidoethyl 4-chlorophenyl-(3-trifluoromethylphenoxy) acetate.

49. The pharmaceutical composition of claim 43 in the form of a tablet or capsule.